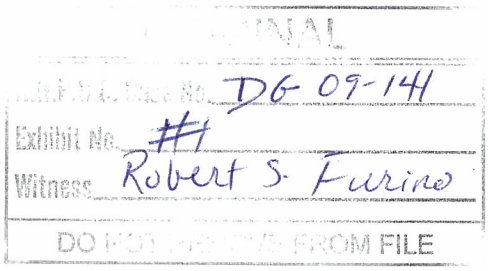
DG 09-141



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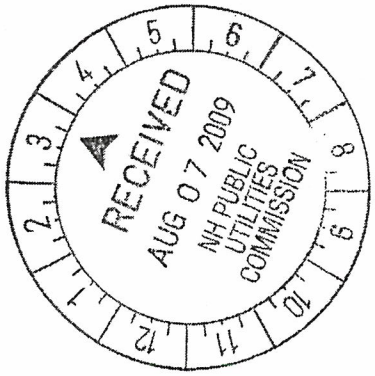


August 7, 2009

BY HAND-DELIVERY AND E-MAIL

Debra A. Howland, Executive Director and Secretary
New Hampshire Public Utilities Commission
21 S. Fruit Street, Suite 10
Concord, NH 03301-2429

RE: Docket No. DG 09-

Dear Director Howland:

Enclosed on behalf of Northern Utilities, Inc. ("UES" or "Company") is an original and six copies of the Company's Petition For Approval Of Proposed Financial Hedging Program Redesign. Northern's redesign proposes three primary changes to the program, and also addresses the structure and timing of program implementation, the manner in which price parameters are determined, the budget for the program and, lastly, modifies the schedule under which Northern will purchase futures contracts.

Please note that Attorney Susan S. Geiger will be appearing on behalf of Northern with respect to this matter, and I request that she be included on all service and e-mail lists:

Susan S. Geiger, Esq.
Orr & Reno, P.A.
P.O. Box 3550
Concord, NH 03302-3550
ssg@orr-reno.com

Thank you for your attention to this matter.

Sincerely,

Gary Epler
Attorney for Northern Utilities, Inc.

Enclosure

cc: Meredith Hatfield, Esq., Consumer Advocate
Edward Damon, Staff Counsel
Susan G. Geiger, Esq.

Gary Epler
Chief Regulatory Counsel

6 Liberty Lane West
Hampton, NH 03842-1720

Phone: 603-773-6440
Fax: 603-773-6640
Email: epler@unitil.com

BEFORE THE NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

NORTHERN UTILITIES, INC.	)	**DOCKET NO. DG 09-____**
Petitioner	)	

PETITION FOR APPROVAL OF PROPOSED FINANCIAL HEDGING PROGRAM REDESIGN

Northern Utilities, Inc. ("Northern" or "Company") submits this Petition to the New Hampshire Public Utilities Commission ("Commission") requesting approval of Northern's proposed Financial Hedging Program redesign. In support of its Petition, Northern states the following:

Petitioner

Northern is a New Hampshire corporation and a public utility under New Hampshire law. Northern provides natural gas distribution services to a total of 52,000 customers in 44 New Hampshire and southern Maine communities, stretching from Atkinson, New Hampshire, in the south, to Lewiston-Auburn, Maine, in the north.

Background

As the Commission is aware, Northern has in place a common hedging program in New Hampshire and Maine. On April 15, 2009, Northern filed its Annual Hedging Report filed with the Maine Public Utilities Commission ("MPUC") in MPUC Docket No. 2001-679. In the Report, Northern identified several program attributes that could serve as potential building blocks for an effective financial hedging program. Accordingly, Northern proposes a redesign of the current hedging program. The details of the proposed redesign are provided in Exhibit NUI-1 to this Petition. Northern proposes three primary changes to the program: 1) the introduction of a price ceiling

calculated pursuant to a formula, above which purchases of futures contracts will be postponed; 2) the elimination of the Price-Based component of the existing hedging program; and 3) a process that provides for the sale of futures contracts that have appreciated in value above a specified percentage. This proposed redesign also addresses the structure and timing of program implementation, the manner in which price parameters are determined and the budget for the program.

The proposed redesign modifies the schedule under which Northern will purchase futures contracts. As a result, the hedging plan for the Peak Season of 2010-11, which Northern will file with its Cost of Gas Adjustment ("COG") filing on or about September 15, 2009, will involve a transition from the current program structure to the proposed program. The proposed program provides for hedging the Peak Season volumes only, including hedging that applies to storage injections. Assuming approval of the proposed redesign, Northern would file its first hedging plan under the revised structure with its Off-Peak COG filing in 2010, to apply to the Peak Season of 2011-12.

Northern has filed this proposed redesign separately with the MPUC, with the goal of maintaining a common approved hedging program in both Maine and New Hampshire.

Description of Exhibits

Attached to this Petition is the following Exhibit:

Exhibit NUI-1: Proposed Financial Hedging Program Redesign

Request for Approvals

Northern respectfully requests that the Commission issue a final order containing the following findings of fact, conclusions and approvals:

1. FIND that Northern's proposed Financial Hedging Program Redesign is reasonable and in the public interest;

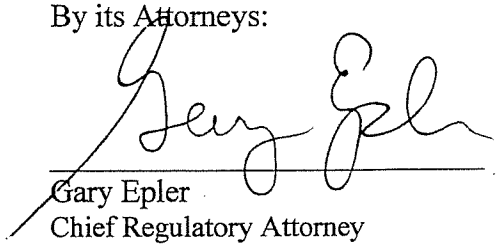
5. CONCLUDE that, based upon the above Finding, Northern's Petition should be approved as filed.

Conclusion

For all of the foregoing reasons, Northern requests that the Commission grant it the approvals requested in this Petition, and for such other relief as the Commission may deem necessary and proper.

Respectfully submitted,

NORTHERN UTILITIES, INC.
By its Attorneys:



Gary Epler
Chief Regulatory Attorney
Unitil Service Corp.
6 Liberty Lane West
Hampton, NH 03842-1720
603.773.6440 (direct)
603.773.6640 (fax)
epler@unitil.com

Susan S. Geiger, Esq.
Orr & Reno, P.A.

One Eagle Square
P.O. Box 3550
Concord, NH 03302-3550
(603) 223-9154 (direct)
(603) 223-9054 (fax)
ssg@orr-reno.com

August 7, 2009

STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

NORTHERN UTILITIES, INC.

PETITION FOR APPROVAL OF

PROPOSED FINANCIAL HEDGING PROGRAM REDESIGN

Docket No. DG 09-_____

Submitted by
NORTHERN UTILITIES, INC.

August 7, 2009

I. INTRODUCTION

In its Annual Hedging Report filed with the Maine Public Utilities Commission ("MPUC") on April 15, 2009 in MPUC Docket No. 2001-679, Northern Utilities, Inc. ("Northern") identified several program attributes that could serve as potential building blocks for an effective financial hedging program. At this time, Northern proposes a redesign of the current hedging program. This redesign incorporates simple techniques and clearly defined rules meant to provide transparency and structure. Northern proposes three primary changes to the program: 1) the introduction of a price ceiling calculated pursuant to a formula, above which purchases of futures contracts will be postponed, 2) the elimination of the Price-Based component of the existing hedging program and 3) a process that provides for the sale of futures contracts that have appreciated in value above a specified percentage. This proposed redesign also addresses the structure and timing of program implementation, the manner in which price parameters are determined and the budget for the program.

The proposed redesign modifies the schedule under which Northern will purchase futures contracts. As a result, the hedging plan for the Peak Season of 2010-11, which Northern will file with its Cost of Gas Adjustment ("COG") filing on or about September 15, 2009, will involve a transition from the current program structure to the proposed program. The proposed program provides for hedging the Peak Season volumes only, including hedging that applies to storage injections. Assuming approval of the proposed

redesign, Northern would file its first hedging plan under the revised structure with its Off-Peak COG filing in 2010, to apply to the Peak Season of 2011-12.

Northern has filed this proposed redesign separately with the MPUC with the goal of maintaining a common hedging program approved by the Commissions in both Maine and New Hampshire.

II. PROPOSED CHANGES TO NORTHERN'S HEDGING PROGRAM

The proposed redesign builds upon the structure of the current hedging program. Table 1 below compares the proposed changes to the methods employed by the current program. The proposed changes are discussed in greater detail below.

Table 1: Summary of Proposed Changes to Northern's Hedging Program

Program Attribute	Current Program	Proposed Program
Transaction Types	Time-Based (fixed) & Price-Based (variable) components	Time-Based transactions, subject to ceiling prices (would purchase less if prices too high). Price-Based component discontinued.

Program Attribute	Current Program	Proposed Program
Structure of Price Parameters	Define seasonal price frequency distribution in deciles, with trigger points (65^{th}, 35^{th}, 20^{th})	Define monthly price ceiling at one average standard deviation above the mean.
Data Underlying Price Parameters	Price frequency calculated for entire season based upon 5 years of prompt month historical prices inflated using PPI, more heavily weighted for the most recent year.	Price ceiling calculated by month based upon average daily closing prices for last 2 years of trading for the 5 most recent settled contracts and the 2 contracts now trading in their final 2 years.[1]
Price-Based Aspects	Purchase additional volumes (10% each) when prices fall below the 65^{th}, 35^{th} and 20^{th} percentile (up to 30% additional).	Postpone purchases when prices exceed ceiling and queue until prices fall below ceiling. Some purchases may not be executed, though the earlier start (18 months before Peak Season) will provide added time for queued purchases to be made.
Delivery Periods	Hedges apply to Peak Season (Nov-Apr) & partial Off-Peak Season (May, Oct).	Hedges apply to Peak Season only (Nov-Apr), including storage refill (May-Oct).
Timing of Purchases	Time-Based purchases are made each month on the day the prompt month contract settles. Price-Based purchases are made anytime during the month when the criteria are triggered.	Provided prices remain below the ceiling, purchases are made each month on the day the prompt month contract settles. Queued purchases are made any time during the month when prices fall below the ceiling.

[1] For example, the five most recent settled January contracts include Jan 2005, Jan 2006, Jan 2007, Jan 2008 and Jan 2009. The two open contracts are Jan 2010 and Jan 2011, both of which are trading within their final two years before settlement.

Program Attribute	Current Program	Proposed Program
Volume Targets	Targets based on planned pipeline deliveries, which vary by month according to resource plan. Fixed Time-Based target (40% of pipeline), plus variable target (up to 30% of pipeline) associated with Price-Based component.	Target equals 34% of Peak Season load, regardless of resources used to supply. Half (17%) purchased for storage injection, patterned ratably over fill season; half (17%) purchased for peak month delivery, patterned to follow load.
Purchasing Schedule	Peak Season hedging plan filed with prior Peak Season CGA; hedges purchased during 12 months of Sep through Aug. Off-Peak hedging plan filed with prior Off-Peak CGA; hedges purchased during 12 months of Mar through Feb. Hedging begins 12 months before the CGA is filed.	Hedging plan filed with Off-Peak CGA 3 seasons before the Peak Season being hedged. Early start allows hedging of storage. Initial schedule set to purchase hedges over 12 months of Mar through Feb; provides 6 months to make postponed peak month purchases. Hedging begins 18 months before Peak Season CGA is filed.
Appreciation Rule	Futures contracts are held until settlement regardless of appreciated value.	Futures contracts that appreciate by 40% or more are sold and proceeds credited to the CGA. Once liquidated, contracts are not replaced.
Program Budget	No budget. Account balance to cover margin requirements has exceeded $10 million.	Incremental purchases suspended if margin requirements exceed $4 million.

Transaction Types

The current program involves both Time-Based and Price-Based transactions, representing fixed and variable aspects of the program, respectively. The Time-Based transactions are scheduled in advance and executed in a dollar cost averaging method

without regard to the level of prices. The Price-Based transactions are made when prices decrease to any of three pre-defined levels. Because prices may continue to fall after Price-Based purchases are made, Price-Based purchases are not always lower in price than Time-Based purchases. The current portfolio of futures contracts for the winter of 2009-10 includes Time-Based purchases that were approximately $0.90 cheaper than the Price-Based purchases.

Under the proposed program, Northern will discontinue the Price-Based component and fix the maximum amount of contracts to be purchased for a given period in order to provide a more consistent level of hedging activity. Northern also proposes to establish ceiling prices to avoid purchases during price "spikes." As long as prices remain below the ceiling prices, Northern will purchase futures contracts each month in accordance with a pre-defined schedule. If prices rise above the ceiling price established for a contract month, the purchases would be delayed until prices fall below the ceiling price.

Structure of Price Parameters

The Price-Based component which Northern proposes to discontinue utilizes a seasonal price frequency distribution calculated in deciles and used to establish price triggers at the 65th, 35th and 20th percentiles. When prices drop below these respective percentiles, additional futures contracts are purchased. The trigger prices are not differentiated by month; they apply to all months of a season being hedged.

Under the proposed hedging program, Northern will establish a single price parameter: a monthly ceiling price. The ceiling price is set at an average standard deviation above the historical mean (the derivation is discussed below). The purpose of the price ceiling is to avoid purchasing when prices are high relative to historical experience. Purchasing when prices are high locks in a negative result, whereas avoiding a high priced transaction preserves the opportunity that a better price will be available in the future. Underlying this approach is the belief that over time prices will tend toward a long term mean.

Data Underlying Price Parameters

The data used for the frequency distribution that establishes the price triggers for the Price-Based component of the current program include five years of prompt month history that has been inflated by the producer price index (PPI). In calculating the frequency distribution, the most recent year is more heavily weighted than the earlier years.

Rather than utilizing the rolling prompt month historical contract prices in calculating the ceiling prices, Northern proposes to use the daily closing prices for futures contracts over the span of each contract's last two years of trading. Price behavior over time provides a variance that can be applied to set a suitable price ceiling. Under the proposed program, futures contracts will be purchased as many as twenty-four, and as few as two, months before the delivery month. Using prices from the final two years of

trading activity will better align the price ceiling calculation in terms of horizon to delivery. Northern proposes to utilize nominal data rather than to inflate the data by an inflation index.

The monthly price ceilings would be calculated on the basis of historical mean price levels and standard deviations as follows: the mean value is calculated for the final two years (or 500 trading days) for each of the most recent five settled contracts for a given calendar month (January 2005, January 2006, ... January 2009) and for the next two contracts for that calendar month that are still trading (January 2010, January 2011). The average of the means for these seven contracts is taken as the average mean. Incorporating the currently trading contracts adds current market pricing to the calculation.

The standard deviation is calculated for each of the most recent five settled contracts for a given calendar month (January 2005, January 2006 ... January 2009), and then each is calculated as a percentage of its mean. The average of these percentage standard deviations for the five years of completed history is the percent standard deviation. Thus the standard deviation reflects the five years of completed history, but not the two years of currently trading contracts.[2] The percent standard deviation is applied to the

[2] The two years of currently trading contracts are assumed not to have sufficient history upon which to establish an appropriate measure of variance. Thus, they impact the level (mean) of pricing, but not the variance.

average mean in order to calculate the price ceiling, which is set at one standard deviation above the mean for each calendar month.

Exhibit A provides thumbnail graphics depicting the level of closing prices during the final two years of trading for all contracts that have settled over the past five years and the two contracts that are currently trading in their final two years before settlement, the distribution of prices at which each of the contracts have traded, and calculations of the sample ceiling prices for each month. These calculations will be updated and included in the hedging plan submitted for each Peak Season. Table 2 below summarizes the sample price ceiling calculations. As shown in Table 2, there is considerable variation in the monthly price ceilings for the Peak Season.

Table 2: Sample Hedging Program Monthly Ceiling Prices

		Average Mean[1]	Percent Std Dev[2]	Ceiling Price[3]
Peak Season	Nov	$7.678	18.5%	$9.100
	Dec	$8.136	18.7%	$9.658
	Jan	$8.417	19.7%	$10.073
	Feb	$8.380	19.8%	$10.041
	Mar	$8.178	19.8%	$9.800
	Apr	$7.280	16.0%	$8.448
Refill Season	May	$7.220	16.6%	$8.417
	Jun	$7.284	17.2%	$8.537
	Jul	$7.335	18.1%	$8.663
	Aug	$7.123	16.3%	$8.282
	Sep	$7.161	16.6%	$8.351
	Oct	$7.240	17.8%	$8.526

Peak Season	$8.012	18.8%	$9.520
Refill Season	$7.227	17.1%	$8.463

Note: Data behind these calculations is presented in Exhibit A.

[1]Average mean calculated on average nominal daily closing prices for last 2 years of trading for the 5 most recent settled contracts and the 2 open contracts now trading in their final 2 years.

[2] Percent Standard Deviation calculated as simple average of standard deviations relative to means for last 2 years of trading for the 5 most recent settled contracts.

[3]Ceiling price equals Average Mean escalated by the Percent Standard Deviation; Ceiling Price = Average Mean * (1 + Percent Std Dev).

Price-Based Aspects

Setting the price ceiling at one standard deviation greater than the mean implies that 84 percent of the time prices will be below the ceiling and 16 percent of the time prices will exceed the ceiling.[3] Of course, the future of market prices is unknowable and constantly changing, often in unpredictable ways. Adopting an approach that relies on a long term history of both price levels and price variation provides a reasonable context around which to set such a parameter.

Adopting the price ceiling means that Northern will postpone purchases of futures contracts when prices are high, and may mean that Northern will buy less than the target volume of futures contracts. Under this redesign, however, Northern proposes to move the purchasing schedule ahead six months to provide twelve months to hedge the storage injection season (see below). This change will also provide additional time for Peak Season market prices to drop below the ceiling.

Delivery Periods

The current program hedges deliveries in the summer months of May and October. Northern proposes to discontinue hedging volumes for summer delivery, and to limit the program only to volumes associated with delivery during the Peak Season. However,

[3] Assuming a normal distribution, one standard deviation from the mean encompasses 68 percent of outcomes, and half of the remaining 32 percent of outcomes (16 percent each) will be lower than the bandwidth covered by one standard deviation, and half will be higher. Thus, the percentage of expected outcomes below the price ceiling equals 84 percent (68 + 16).

Northern proposes to hedge both the storage refill season (May through October) as well as the peak load season (November through April). Thus, all twelve months of the year will be hedged under the proposed program.

Storage represents the largest supply resource used to meet customer demand in the heating season and consequently the largest portion of commodity costs during the heating season. In light of the high costs seen during the summer of 2008 and the competing demand for natural gas presented by the electric generation sector to meet cooling demands during the summer, Northern believes that it is appropriate to hedge storage injections in order to provide price stability to customers.

Timing of Purchases

Timing of purchases will remain the same as under the current program, with scheduled purchases made each month on the day the prompt month contract settles, as long as prices remain below the price ceiling. When purchases have been delayed due to the price ceiling, they will be executed as soon as possible when prices fall below the price ceiling, in a manner similar to price-triggered purchases made under the current program.

Volume Targets

The current program establishes both a fixed target volume (the Time-Based component) and a variable target volume (the Priced-Based component), each

representing a percentage of expected pipeline delivered supplies based on a resource portfolio dispatch model run. Under the revised hedging program, Northern proposes a single, fixed target volume based on projected loads expected to be delivered to sales service customers during the Peak Season being hedged. Specifically, Northern proposes to financially hedge 34% of Peak Season load, with half of the volume hedged for the summer refill season and half for the Peak Season. As much as is practical, the pattern of summer fill purchases will be ratable over the summer months and the pattern of Peak Season purchases will follow load levels.

Table 3 below presents a sample calculation of expected Peak Season loads and the resulting number of natural gas futures contracts under the proposed program. Table 3 also shows total volumes subject to fixed prices by factoring in physical storage volumes. Based upon the assumptions provided below, 34% of storage would be financially hedged. Including all storage volumes, and assuming all planned financial hedges are implemented, 66% of Peak Season deliveries would be at a fixed price.

Table 3. Sample Hedging Program Target Volumes

Determination of Target Volumes	PCT	No. Contracts	Volume (Dth)
Peak Season Deliveries for Supply Service			
Maine			2,541,000
New Hampshire			3,045,000
Total Peak Season Deliveries			5,586,000
Target Volume	34%		1,899,240
Volume per Contract			10,000
Target Volumes - Total		190	1,900,000
Target Volumes - Storage Refill Season	50%	95	950,000
Target Volumes - Peak Load Season	50%	95	950,000
Total Volumes Subject to Fixed Prices, Including Storage			
Physical Storage Inventory* ("Physical Inventory")			2,758,654
Financially Hedged Storage Volume (18-12 mo. before delivery)	34%		950,000
Fixed Price Ratable Storage Injections (6-1 mo. before delivery)	66%		1,808,654
Financially Hedged Pipeline Gas ("Hedged Pipeline")			950,000
Total Fixed Price Gas (Physical Inventory plus Hedged Pipeline)			3,708,654
Total Peak Season Deliveries			5,586,000
Percent of Peak Season Deliveries at Fixed Price	66%		

* Reflects short-term market release of 500,000 Dth of Washington 10 Storage and assignment (direct or company managed) of another 350,000 Dth.

Purchasing Schedule

Under the current hedging program, the Peak Season hedging plan is filed with the prior Peak Season's COG, so that Northern purchases hedges during the twelve months of September through August preceding a given Peak Season. The Off-Peak hedging plan is filed with the prior Off-Peak COG, which also translates to a purchasing

schedule of twelve months of March through February. In each case, hedging begins twelve months before the COG is filed.

Northern proposes that hedging plans be filed with Off-Peak COG three seasons prior to the Peak Season being hedged. Under this proposed schedule, hedging begins eighteen months prior to the Peak Season CGA filing. This early start allows Northern to hedge storage, and provides additional time for purchases postponed due to the price ceiling described above. Table 4 below provides a sample initial schedule of purchases that incorporates the target volumes and patterns discussed above. The term "initial schedule" reflects the possibility that some purchases may be postponed or never filled due to the price ceiling. The sample initial schedule provides for an equal number of contracts to be purchased each month and for both the refill and Peak seasons. Each hedging plan submitted for a given Peak Season would follow this pattern as closely as practical.

Table 4. Sample Initial Schedule of Natural Gas Futures Purchases

		Refill Season						Peak Season								
Purchase Month	Purchase Month No.	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	Refill Season	Peak Season	Total Contracts
Mar-10	1	1	1	2	1	1	1	0	2	2	2	1	1	7	8	15
Apr-10	2	1	2	1	1	2	1	1	1	2	1	2	1	8	8	16
May-10	3	2	1	1	2	1	1	1	1	2	2	1	1	8	8	16
Jun-10	4	1	1	2	1	1	2	0	2	1	2	2	1	8	8	16
Jul-10	5	1	2	1	1	2	1	1	1	2	1	2	1	8	8	16
Aug-10	6	2	1	1	2	1	1	1	1	2	2	1	1	8	8	16
Sep-10	7	1	1	2	1	1	2	0	2	1	2	1	1	8	7	15
Oct-10	8	1	2	1	1	2	1	1	1	2	1	2	1	8	8	16
Nov-10	9	2	1	1	2	1	1	1	1	2	2	1	1	8	8	16
Dec-10	10	1	1	2	1	1	2	0	2	1	2	2	1	8	8	16
Jan-11	11	1	2	1	1	2	1	1	1	2	1	2	1	8	8	16
Feb-11	12	2	1	1	2	1	1	1	1	2	2	1	1	8	8	16
Mar-11	13							Fill Postponed Purchases as Needed								
Apr-11	14															
May-11	15															
Jun-11	16															
Jul-11	17															
Aug-11	18															
Total Contracts		16	16	16	16	16	15	8	16	21	20	18	12	95	95	190

Per Initial Schedule, longest lead = 2 years (buy Apr-12 in Mar-10)
Per Initial Schedule, shortest lead = 8 months (buy Nov-11 in Feb-11)
For Postponed Purchases, shortest lead = 2 months (buy Nov-11 in Aug-11)

Appreciation Rule

Historically Northern has held its futures contracts until settlement, regardless of whether and to what extent the contract may have appreciated in value.

Under the proposed hedging plan, Northern would adopt an Appreciation Rule whereby it would liquidate all futures contracts that appreciate in value by 40 percent or more. The proceeds from the sales would be credited to the COG, allowing customers to benefit from the captured value. Once contracts are liquidated, they would not be replaced. Northern proposes to apply the Appreciation Rule at any time prior to the final settlement of a given futures contract, including during the delivery months of a given peak season. For example, if the March 2011 contract were to trigger the Appreciation Rule during December of 2010, the contract would be liquidated.

In determining an appropriate appreciation cutoff, Northern strove to identify an attainable threshold that would not be reached too easily, but would also not easily be surpassed after the contract had been liquidated, resulting in foregone additional value. Northern analyzed the historical contract prices obtained during the five years of peak months from November 2004 through April 2009 (or a total of 360 actual pricing points)[4] by comparing the daily closing price each day after purchase until they were settled. The number of days that each contract exceeded a given level of appreciation was

[4] In its analysis, Northern assumed it purchased only one contract with each purchase. In reality, varying numbers of contracts were purchased, but the purpose of the analysis was to determine the likelihood of varying levels of appreciation.

tallied and used to construct a probability distribution indicating the likelihood of a contract appreciating by given levels along a five percent gradient frequency distribution. The summary data from this analysis is presented as Exhibit B.[5]

The levels of appreciation varied greatly by year, with some contracts purchased for the Peak Seasons of 2004-05 and 2005-06 appreciating by more than 100 percent. Hurricanes Katrina and Rita in 2005 contributed to the 2005-06 result. In contrast, the contracts purchased for the Peak Seasons of 2006-07 and 2007-08 did not appreciate by much or had decreased in value over much of the term during which they were held. Finally, the contracts for the Peak Season of 2008-09 experienced periods of significant rise in value and significant drop in value. Taking the contracts from these five years together, on average 13% appreciated by at least 40% during the time before they settled. That level was chosen as an appropriate level for selling appreciated contracts.

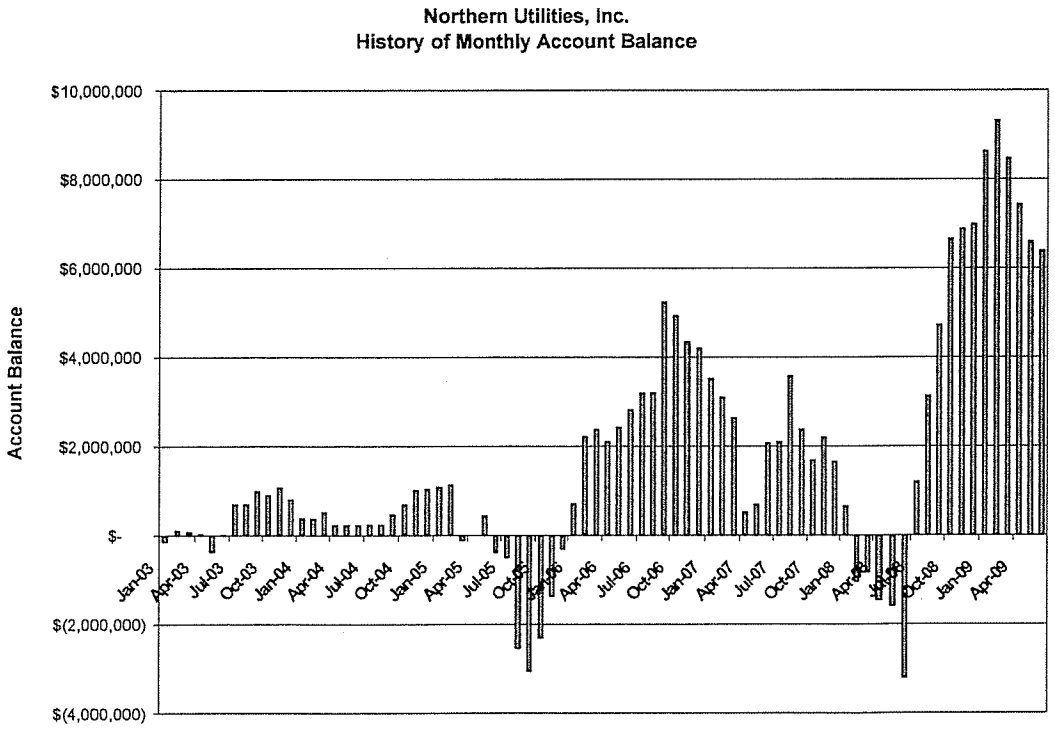
Program Budget

The current hedging program does not have any budgetary limits. In recent months, Northern has funded margin requirements of $8 million to more than $10 million in order to maintain the futures account that holds the portfolio of futures contracts. As illustrated in Chart 1, this level greatly exceeds the levels experienced during any prior periods. Going forward Northern proposes that the account balance be capped at $4

[5] Exhibit B presents a summary of the five year period analyzed, followed by a one sheet breakout by month of each of the years studied, and lastly a breakout by contract of purchases during the month of November 2004.

million. In the event that margin requirements exceed $4 million, purchases of additional hedges would be suspended. Northern anticipates that the proposed changes in the hedging program described above such as the price ceiling, the Appreciation Rule, and the elimination of the Price-Based component, will serve to mitigate margin requirements.

Chart 1: History of Monthly Account Balance



III. TRANSITION PERIOD

As discussed in the Introduction, assuming the proposed program is approved, Northern will file its first complete hedging plan under the new structure in early 2010 for the winter of 2011-12.

Northern respectfully requests permission to implement the proposed redesign with its September 2009 COG filing which will provide the hedging plan for the Peak Season of 2010-11. Northern anticipates applying futures contracts previously purchased for the months of May 2010 and October 2010 toward the storage refill volumes and would backfill around them as needed to provide the level of hedging coverage anticipated under the revised program. The proposed program budget limit would not be introduced until after the futures contracts for the Peak Season of November 2009 through April 2010 come to maturity.

IV. CONCLUSION

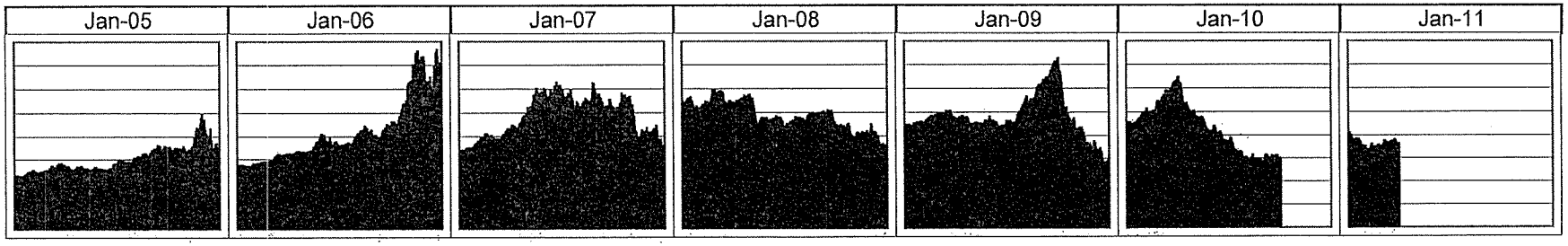
Northern believes that the proposed hedging program described herein will provide significant benefits to ratepayers going forward in reduced exposure to market volatility and the ability to capture financial benefits of Northern's hedging contracts. The proposed program addresses shortcomings in the existing hedging program, most notably by introducing a ceiling price for hedges, and by providing a mechanism to liquidate hedges that have significantly appreciated in value. The proposed program

will offer greater predictability for Northern, ratepayers, and the Commission. Northern would be pleased to meet with Commission Staff, the Office of Consumer Advocate and other interested parties to discuss the proposed revisions to the hedging program.

Dated: August 7, 2009

Northern Utilities, Inc.
NYMEX Closing Prices, 24 months prior to Settle, Last 5 complete years & 2 years still trading - January

Price



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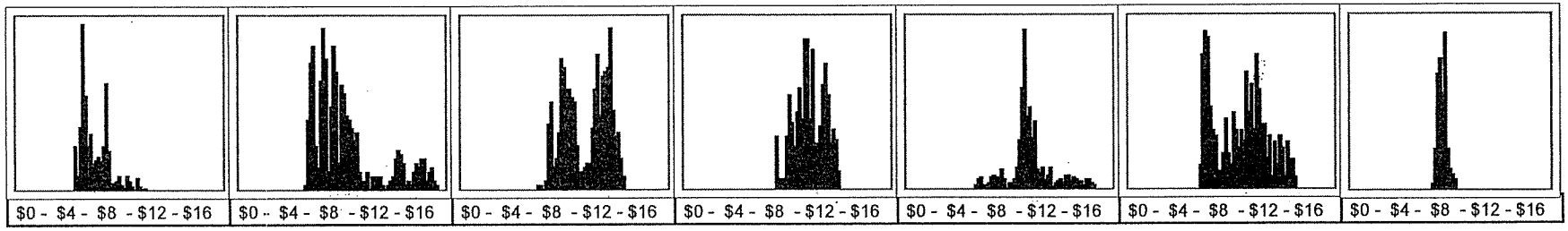


Stats

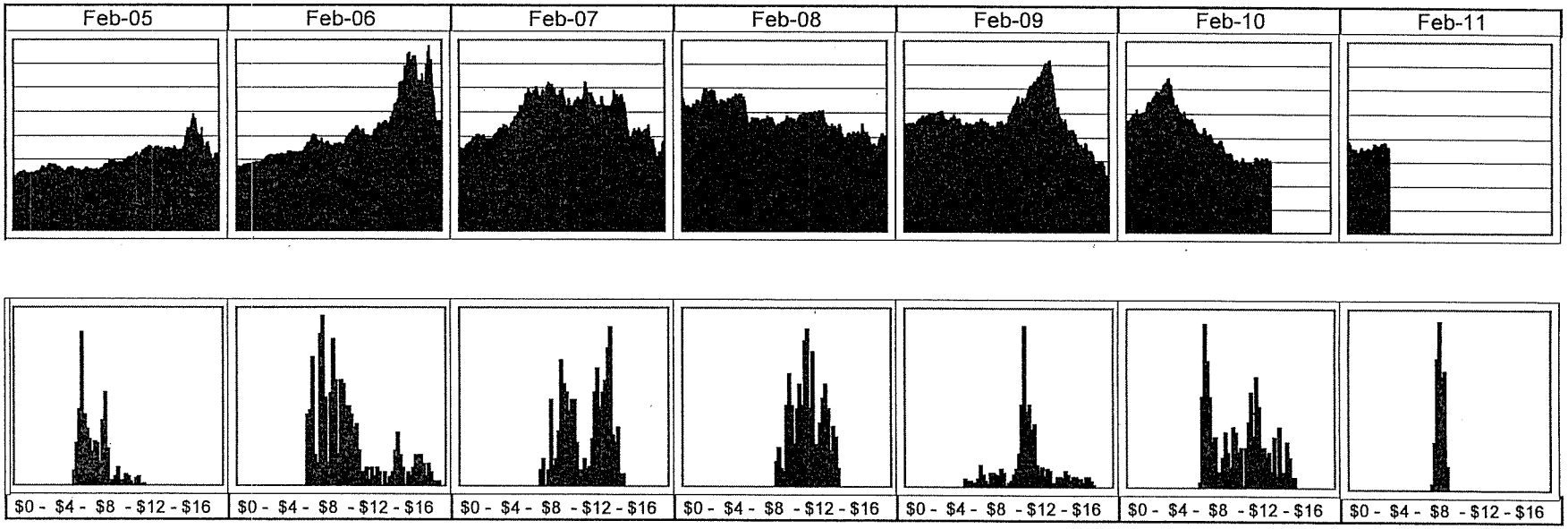
Count	500	Count	500	Count	500	Count	500	Count	500	Count	377	Count	125
Max	9.900	Max	15.378	Max	12.553	Max	11.869	Max	14.516	Max	12.946	Max	8.218
Min	4.403	Min	5.186	Min	5.838	Min	7.025	Min	5.294	Min	5.539	Min	6.568
Settle	6.213	Settle	11.431	Settle	5.838	Settle	7.172	Settle	6.136	Settle	x	Settle	x
Mean (m)	5.990	Mean (m)	8.241	Mean (m)	9.604	Mean (m)	9.663	Mean (m)	9.536	Mean (m)	8.611	Mean (m)	7.273
StDev (s)	1.112	StDev (s)	2.600	StDev (s)	1.702	StDev (s)	1.179	StDev (s)	1.749				
s / m	0.186	s / m	0.315	s / m	0.177	s / m	0.122	s / m	0.183				
m + s	7.102	m + s	10.841	m + s	11.306	m + s	10.842	m + s	11.285				

7Yr Avg Mean (m_{7Yr}) 8.417

5Yr Avg St Dev $(s/m)_{5Yr}$ 0.197

Price Ceiling, = $m_{7Yr} * (1 + (s/m)_{5Yr})$ 10.073

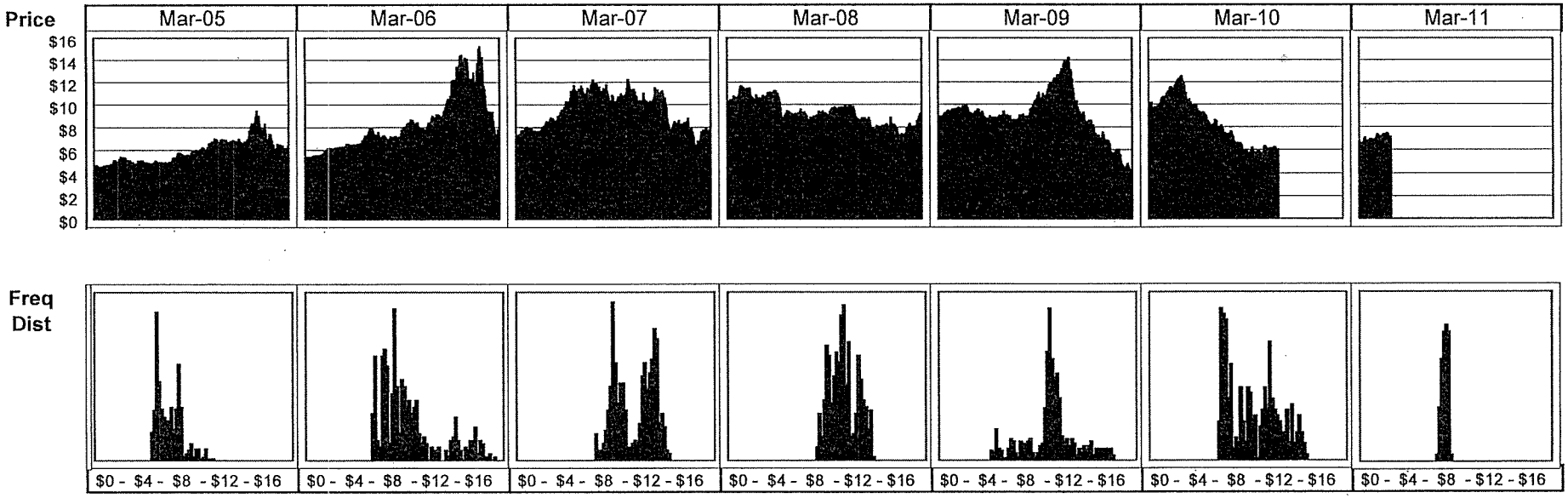
Northern Utilities, Inc.
NYMEX Closing Prices, 24 months prior to Settle, Last 5 complete years & 2 years still trading - February



Stats												
Count	500	Count	500	Count	500	Count	500	Count	500	Count	354	Count	102
Max	9.865	Max	15.427	Max	12.488	Max	11.869	Max	14.446	Max	12.881	Max	7.662
Min	4.454	Min	5.234	Min	6.142	Min	7.142	Min	4.476	Min	5.588	Min	6.568
Settle	6.288	Settle	8.400	Settle	6.917	Settle	7.996	Settle	4.476	Settle	x	Settle	x
Mean (m)	6.018	Mean (m)	8.371	Mean (m)	9.600	Mean (m)	9.545	Mean (m)	9.387	Mean (m)	8.578	Mean (m)	7.161
StDev (s)	1.095	StDev (s)	2.545	StDev (s)	1.697	StDev (s)	1.181	StDev (s)	1.921				
s / m	0.182	s / m	0.304	s / m	0.177	s / m	0.124	s / m	0.205				
m + s	7.113	m + s	10.916	m + s	11.297	m + s	10.727	m + s	11.309				

7Yr Avg Mean (m_{7Yr}) 8.380 **5Yr Avg St Dev ($s/m)_{5Yr}$** 0.198 **Price Ceiling, = $m_{7Yr} * (1 + (s/m)_{5Yr})$** 10.041

Northern Utilities, Inc.
NYMEX Closing Prices, 24 months prior to Settle, Last 5 complete years & 2 years still trading - March



Stats														
Count	500	Count	500	Count	500	Count	500	Count	500	Count	335	Count	83
Max	9.405	Max	15.287	Max	12.264	Max	11.609	Max	14.166	Max	12.621	Max	7.427
Min	4.440	Min	5.330	Min	6.257	Min	7.154	Min	4.006	Min	5.491	Min	6.373
Settle	6.304	Settle	7.112	Settle	7.547	Settle	8.930	Settle	4.056	Settle	x	Settle	x
Mean (m)	5.904	Mean (m)	8.286	Mean (m)	9.456	Mean (m)	9.271	Mean (m)	9.019	Mean (m)	8.349	Mean (m)	6.960
StDev (s)	1.039	StDev (s)	2.454	StDev (s)	1.596	StDev (s)	1.128	StDev (s)	2.068				
s / m	0.176	s / m	0.296	s / m	0.169	s / m	0.122	s / m	0.229				
m + s	6.943	m + s	10.740	m + s	11.051	m + s	10.399	m + s	11.087				

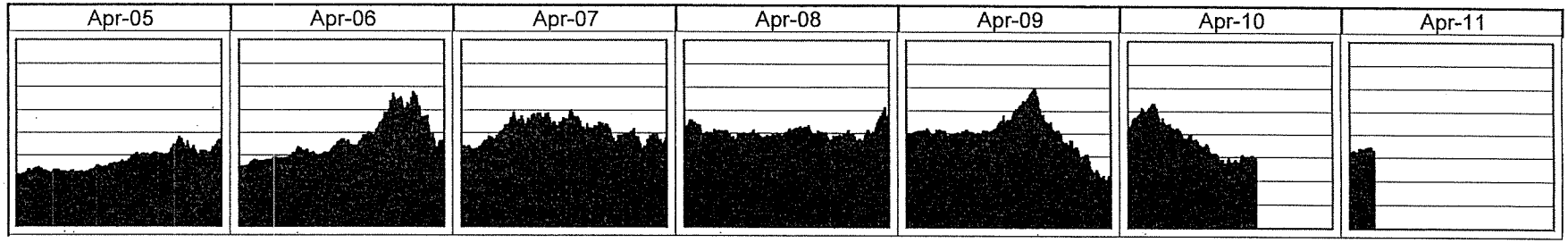
7Yr Avg Mean (m_{7Yr}) **8.178**

5Yr Avg St Dev $(s/m)_{5Yr}$ **0.198**

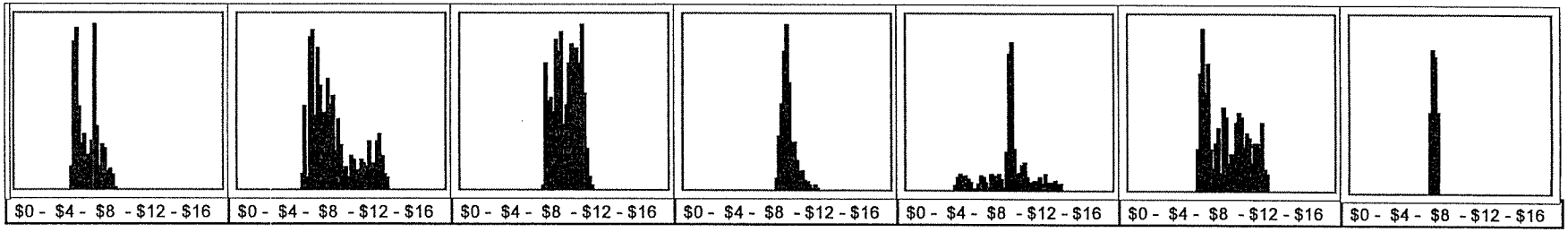
Price Ceiling, = $m_{7Yr} * (1 + (s/m)_{5Yr})$ **9.800**

Northern Utilities, Inc.
NYMEX Closing Prices, 24 months prior to Settle, Last 5 complete years & 2 years still trading - April

Price



Freq Dist

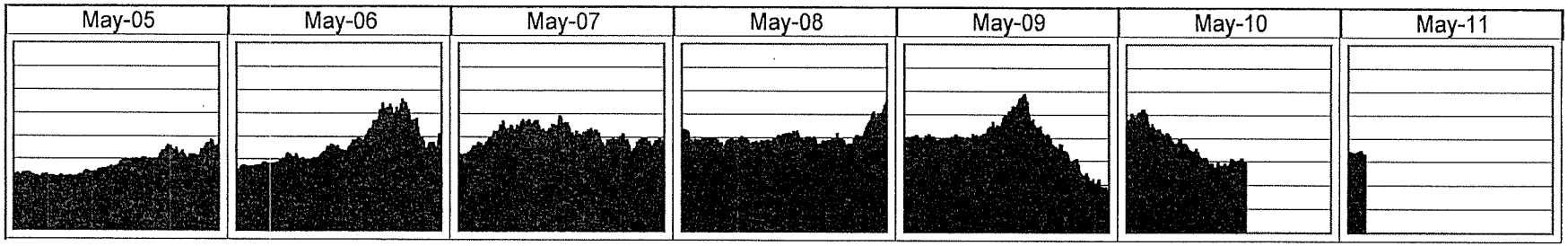


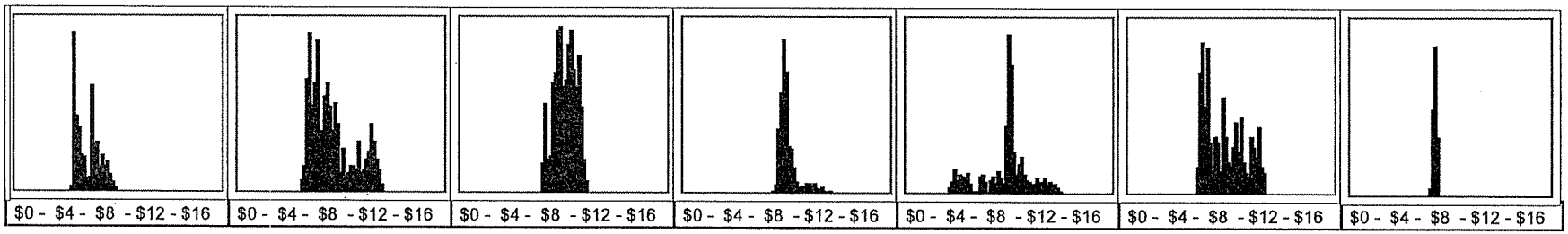
Stats

Count	500	Count	500	Count	500	Count	500	Count	500	Count	314	Count	61
Max	7.685	Max	11.508	Max	10.000	Max	10.230	Max	11.996	Max	10.701	Max	6.907
Min	4.260	Min	4.978	Min	6.357	Min	7.080	Min	3.631	Min	5.226	Min	6.282
Settle	7.323	Settle	7.233	Settle	7.558	Settle	9.578	Settle	3.631	Settle	x	Settle	x
Mean (m)	5.510	Mean (m)	7.298	Mean (m)	8.126	Mean (m)	8.002	Mean (m)	7.908	Mean (m)	7.524	Mean (m)	6.592
StDev (s)	0.872	StDev (s)	1.783	StDev (s)	0.941	StDev (s)	0.529	StDev (s)	1.724				
s / m	0.158	s / m	0.244	s / m	0.116	s / m	0.066	s / m	0.218				
m + s	6.382	m + s	9.082	m + s	9.067	m + s	8.531	m + s	9.632				

7Yr Avg Mean (m_{7Yr}) 7.280 **5Yr Avg St Dev $(s/m)_{5Yr}$** 0.160 **Price Ceiling, = $m_{7Yr} * (1 + (s/m)_{5Yr})$** 8.448

Northern Utilities, Inc.
NYMEX Closing Prices, 24 months prior to Settle, Last 5 complete years & 2 years still trading - May



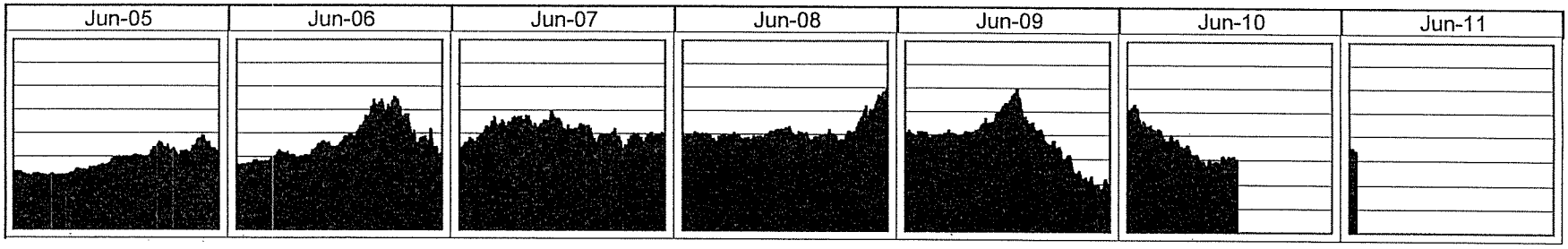


Stats														
Count	500	Count	500	Count	500	Count	500	Count	500	Count	293	Count	42
Max	7.749	Max	11.158	Max	9.780	Max	11.280	Max	11.801	Max	10.521	Max	6.887
Min	4.390	Min	4.941	Min	6.334	Min	6.930	Min	3.253	Min	5.253	Min	6.351
Settle	6.748	Settle	7.198	Settle	7.508	Settle	11.280	Settle	3.321	Settle	x	Settle	x
Mean (m)	5.535	Mean (m)	7.247	Mean (m)	8.036	Mean (m)	7.984	Mean (m)	7.683	Mean (m)	7.387	Mean (m)	6.667
StDev (s)	0.913	StDev (s)	1.678	StDev (s)	0.822	StDev (s)	0.705	StDev (s)	1.861				
s / m	0.165	s / m	0.232	s / m	0.102	s / m	0.088	s / m	0.242				
m + s	6.449	m + s	8.926	m + s	8.858	m + s	8.689	m + s	9.544				

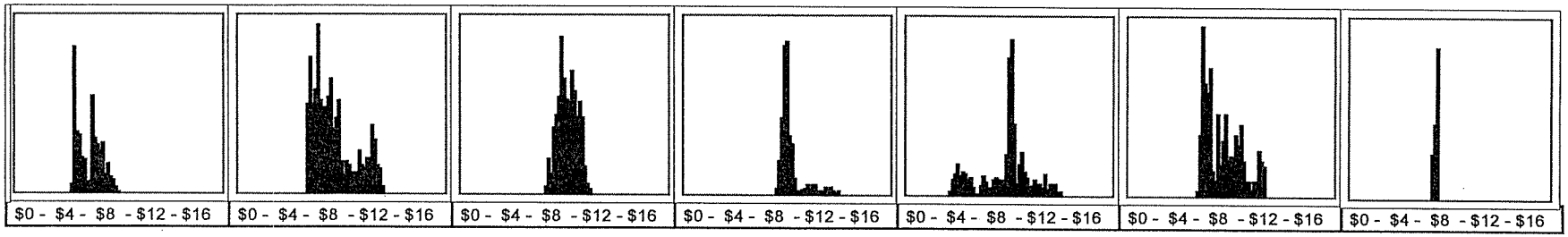
7Yr Avg Mean (m_{7Yr}) 7.220 **5Yr Avg St Dev $(s/m)_{5Yr}$** 0.166 **Price Ceiling, = $m_{7Yr} * (1 + (s/m)_{5Yr})$** 8.417

Northern Utilities, Inc.
NYMEX Closing Prices, 24 months prior to Settle, Last 5 complete years & 2 years still trading - June

Price



Freq Dist



Stats

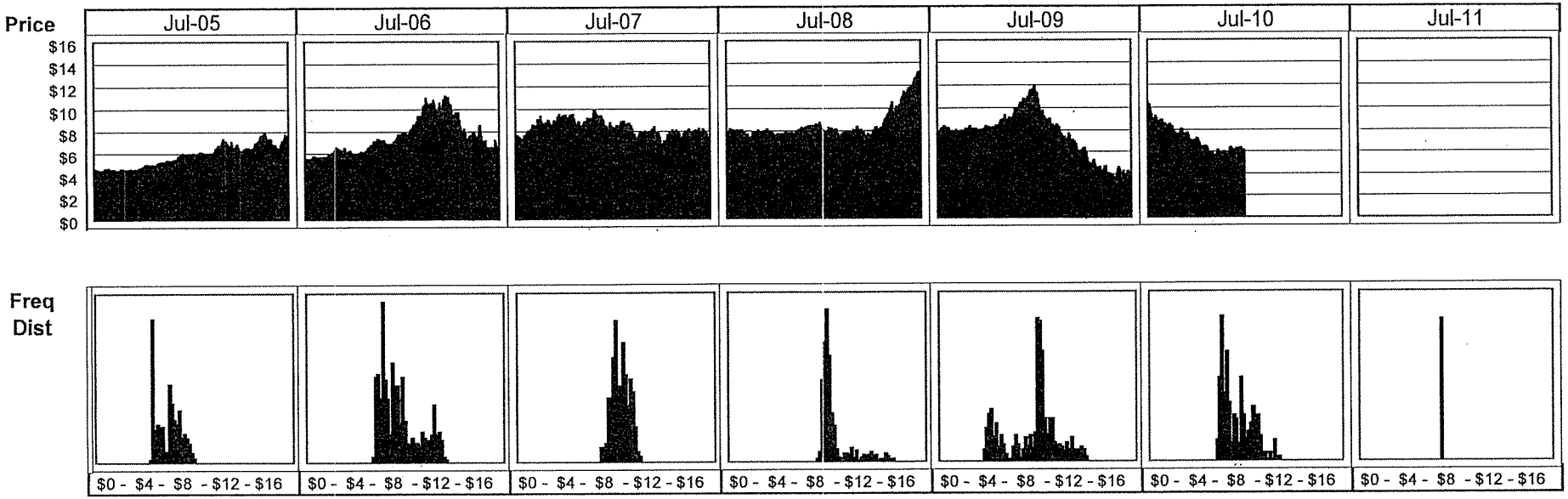
Count	500	Count	500	Count	500	Count	500	Count	500	Count	269	Count	18
Max	7.860	Max	11.180	Max	9.845	Max	11.916	Max	11.869	Max	10.596	Max	6.977
Min	4.388	Min	5.280	Min	6.565	Min	7.010	Min	3.362	Min	5.343	Min	6.552
Settle	6.123	Settle	5.925	Settle	7.591	Settle	11.916	Settle	3.538	Settle	x	Settle	x
Mean (m)	5.635	Mean (m)	7.341	Mean (m)	8.166	Mean (m)	8.178	Mean (m)	7.598	Mean (m)	7.280	Mean (m)	6.791
StDev (s)	0.933	StDev (s)	1.641	StDev (s)	0.741	StDev (s)	0.963	StDev (s)	1.993				
s / m	0.165	s / m	0.224	s / m	0.091	s / m	0.118	s / m	0.262				
m + s	6.568	m + s	8.982	m + s	8.907	m + s	9.141	m + s	9.591				

7Yr Avg Mean (m_{7Yr}) 7.284

5Yr Avg St Dev $(s/m)_{5Yr}$ 0.172

Price Ceiling, = $m_{7Yr} * (1 + (s/m)_{5Yr})$ 8.537

Northern Utilities, Inc.
NYMEX Closing Prices, 24 months prior to Settle, Last 5 complete years & 2 years still trading - July



Stats

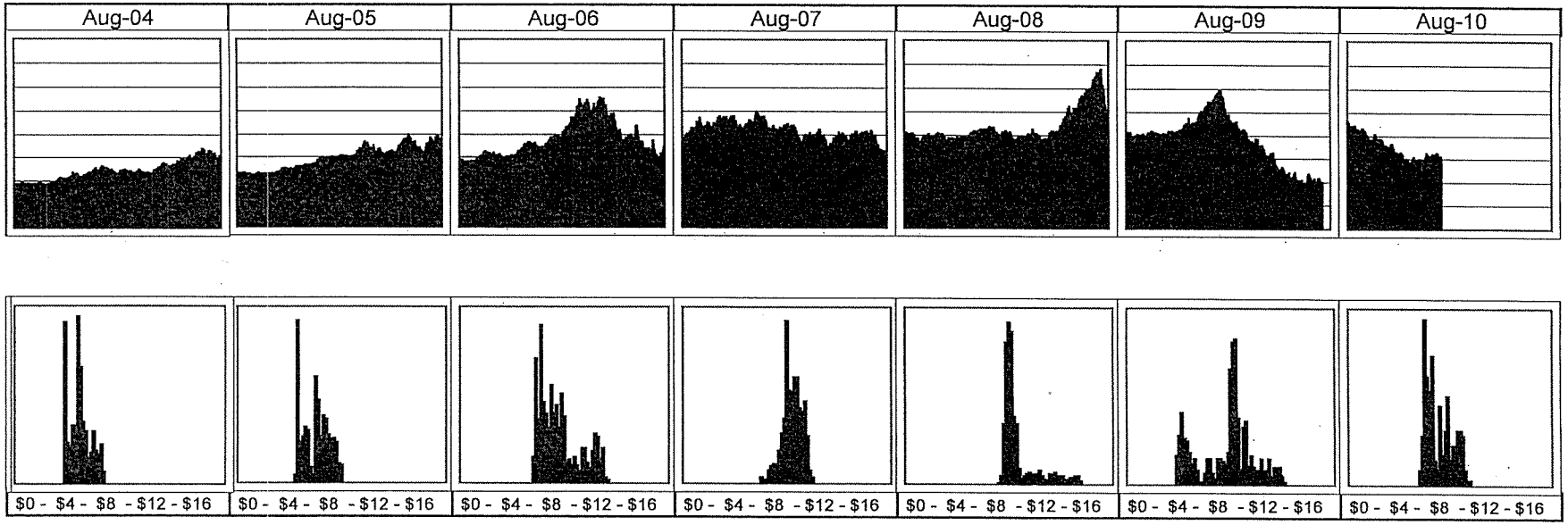
Count	500	Count	500	Count	500	Count	500	Count	500	Count	250	Count	1
Max	7.948	Max	11.213	Max	9.923	Max	13.210	Max	11.959	Max	10.691	Max	6.702
Min	4.387	Min	5.348	Min	6.702	Min	7.100	Min	3.507	Min	5.458	Min	6.702
Settle	6.976	Settle	5.887	Settle	6.929	Settle	13.105	Settle	3.949	Settle	x	Settle	x
Mean (m)	5.772	Mean (m)	7.447	Mean (m)	8.278	Mean (m)	8.469	Mean (m)	7.507	Mean (m)	7.169	Mean (m)	6.702
StDev (s)	0.980	StDev (s)	1.604	StDev (s)	0.697	StDev (s)	1.305	StDev (s)	2.115				
s / m	0.170	s / m	0.215	s / m	0.084	s / m	0.154	s / m	0.282				
m + s	6.752	m + s	9.051	m + s	8.975	m + s	9.774	m + s	9.622				

7Yr Avg Mean (m_{7Yr}) 7.335

5Yr Avg St Dev $(s/m)_{5Yr}$ 0.181

Price Ceiling, = $m_{7Yr} * (1 + (s/m)_{5Yr})$ 8.663

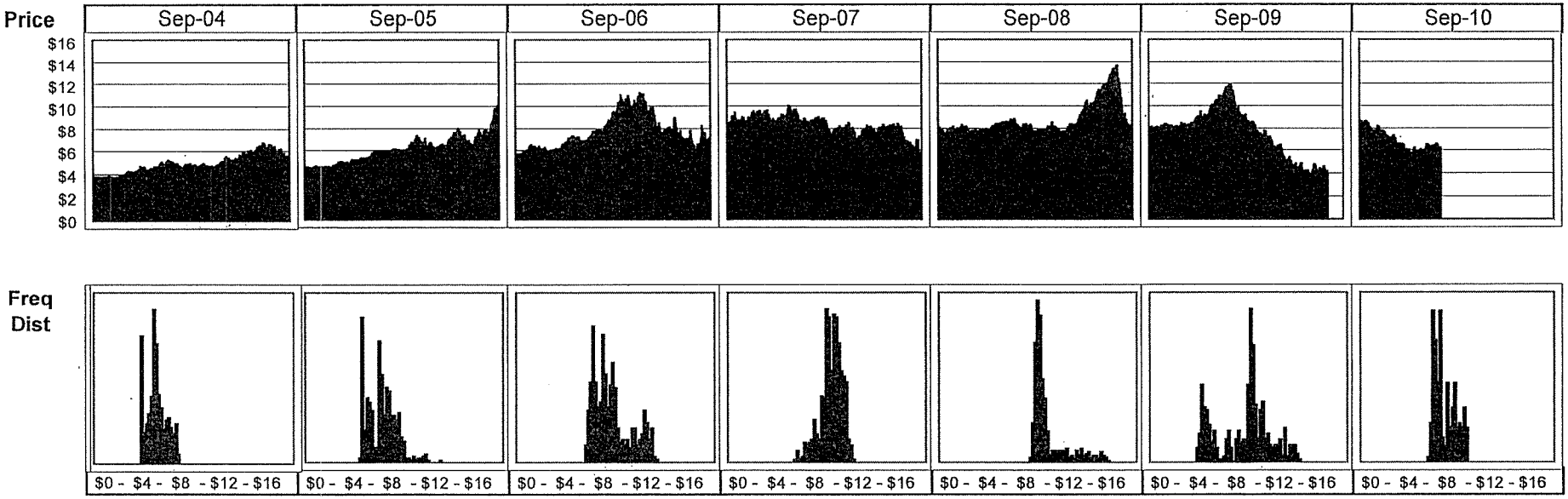
Northern Utilities, Inc.
NYMEX Closing Prices, 24 months prior to Settle, Last 5 complete years & 2 years still trading - August



Stats	Aug-04	Aug-05	Aug-06	Aug-07	Aug-08	Aug-09	Aug-10
Count	500	500	500	500	500	482	230
Max	6.797	7.995	11.253	9.975	13.577	12.016	9.424
Min	3.635	4.387	5.523	5.863	7.175	3.638	5.523
Settle	6.048	7.647	7.042	6.110	9.217	x	x
Mean (m)	4.835	5.913	7.534	8.311	8.685	7.545	7.035
StDev (s)	0.825	1.015	1.581	0.770	1.469		
s / m	0.171	0.172	0.210	0.093	0.169		
m + s	5.661	6.927	9.116	9.081	10.155		

7Yr Avg Mean (m_{7Yr}) 7.123 **5Yr Avg St Dev $(s/m)_{5Yr}$** 0.163 **Price Ceiling, = m_{7Yr} * (1 + $(s/m)_{5Yr}$)** 8.282

Northern Utilities, Inc.
NYMEX Closing Prices, 24 months prior to Settle, Last 5 complete years & 2 years still trading - September



Stats												
Count	500	Count	500	Count	500	Count	500	Count	500	Count	461	Count	210
Max	6.762	Max	10.847	Max	11.243	Max	10.015	Max	13.646	Max	12.036	Max	8.708
Min	3.629	Min	4.385	Min	5.583	Min	5.380	Min	7.270	Min	3.717	Min	5.553
Settle	5.082	Settle	10.847	Settle	6.816	Settle	5.430	Settle	8.394	Settle	x	Settle	x
Mean (m)	4.905	Mean (m)	6.113	Mean (m)	7.638	Mean (m)	8.281	Mean (m)	8.739	Mean (m)	7.559	Mean (m)	6.890
StDev (s)	0.804	StDev (s)	1.191	StDev (s)	1.520	StDev (s)	0.881	StDev (s)	1.463				
s / m	0.164	s / m	0.195	s / m	0.199	s / m	0.106	s / m	0.167				
m + s	5.709	m + s	7.304	m + s	9.158	m + s	9.162	m + s	10.202				

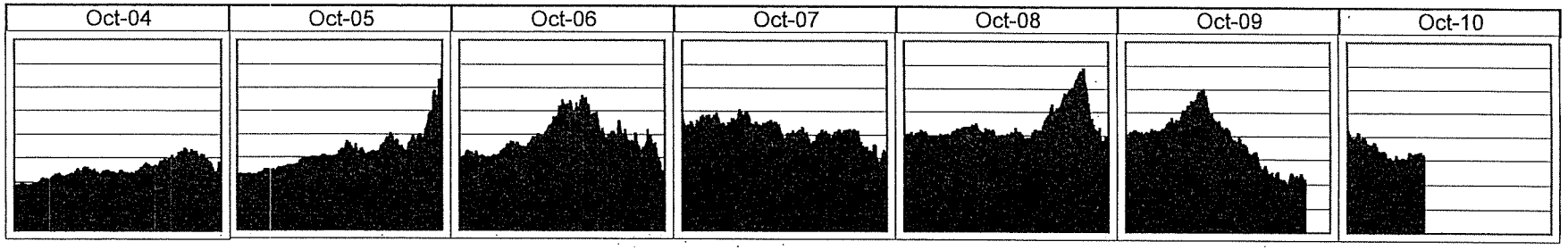
7Yr Avg Mean (m_{7Yr}) 7.161

5Yr Avg St Dev $(s/m)_{5Yr}$ 0.166

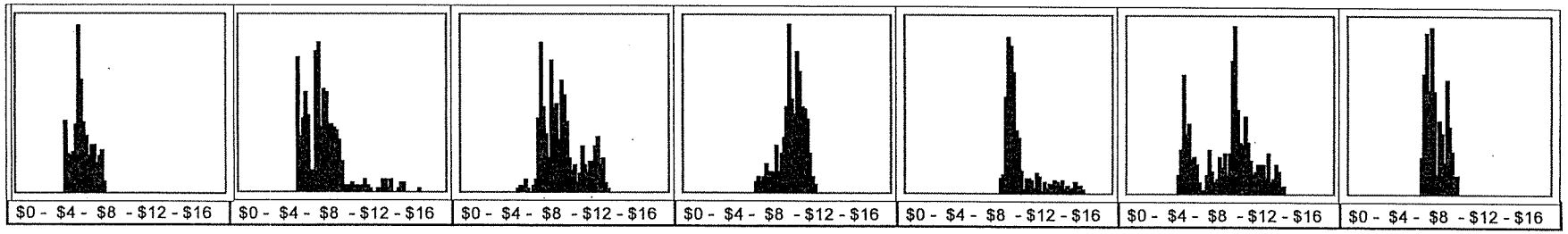
Price Ceiling, = $m_{7Yr} * (1 + (s/m)_{5Yr})$ 8.351

Northern Utilities, Inc.
NYMEX Closing Prices, 24 months prior to Settle, Last 5 complete years & 2 years still trading - October

Price



Freq Dist



Stats

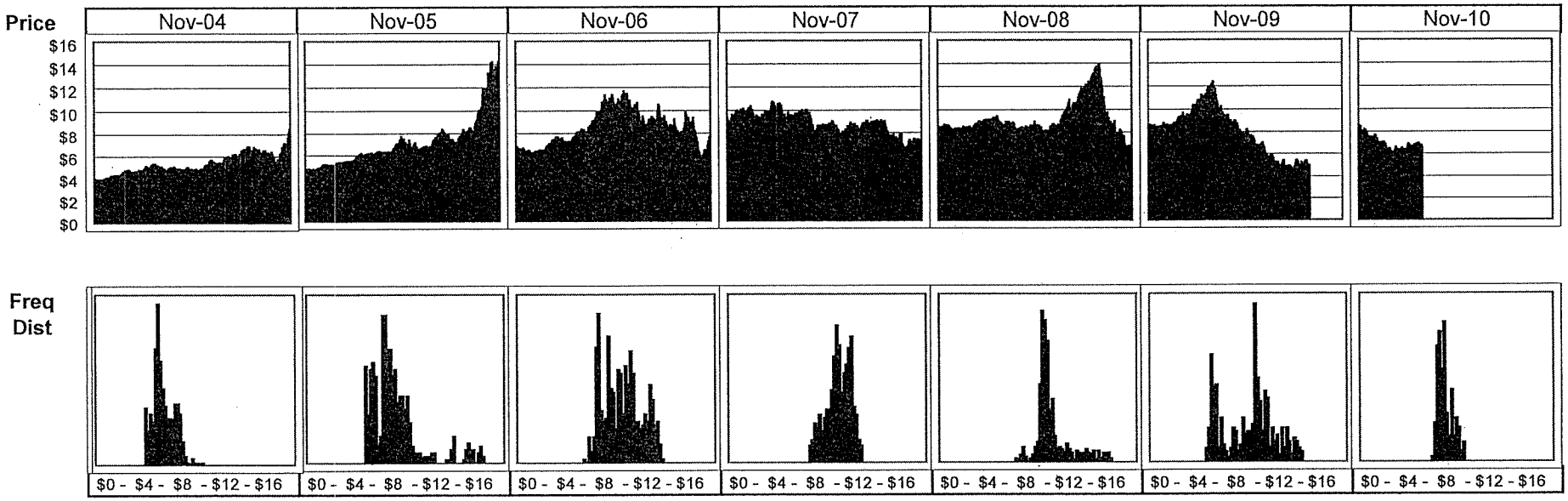
Count	500	Count	500	Count	500	Count	500	Count	500	Count	440	Count	188
Max	6.772	Max	13.907	Max	11.278	Max	10.085	Max	13.726	Max	12.106	Max	8.585
Min	3.634	Min	4.445	Min	4.201	Min	5.468	Min	7.248	Min	3.854	Min	5.643
Settle	5.723	Settle	13.907	Settle	4.201	Settle	6.423	Settle	7.472	Settle	x	Settle	x
Mean (m)	4.980	Mean (m)	6.453	Mean (m)	7.719	Mean (m)	8.290	Mean (m)	8.815	Mean (m)	7.631	Mean (m)	6.790
StDev (s)	0.774	StDev (s)	1.622	StDev (s)	1.536	StDev (s)	0.964	StDev (s)	1.465				
s / m	0.155	s / m	0.251	s / m	0.199	s / m	0.116	s / m	0.166				
m + s	5.754	m + s	8.075	m + s	9.255	m + s	9.254	m + s	10.280				

7Yr Avg Mean (m_{7Yr}) 7.240

5Yr Avg St Dev $(s/m)_{5Yr}$ 0.178

Price Ceiling, = $m_{7Yr} * (1 + (s/m)_{5Yr})$ 8.526

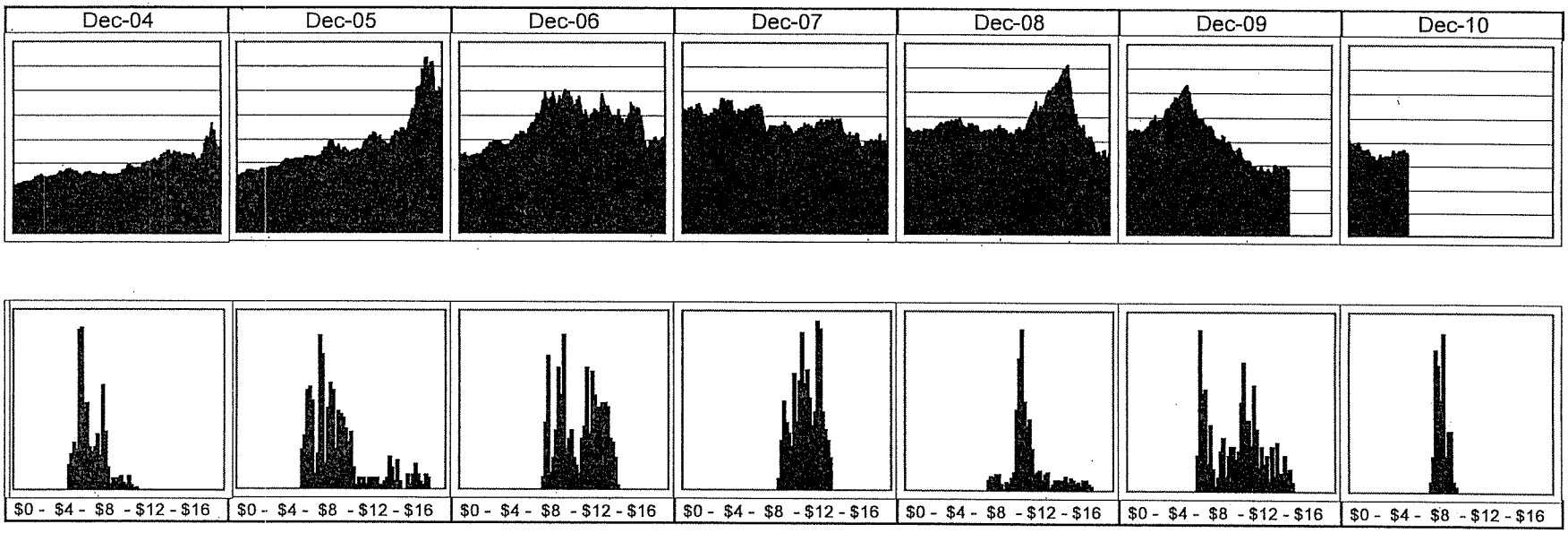
Northern Utilities, Inc.
NYMEX Closing Prices, 24 months prior to Settle, Last 5 complete years & 2 years still trading - November



Stats	Nov-04	Nov-05	Nov-06	Nov-07	Nov-08	Nov-09	Nov-10
Count	500	500	500	500	500	417	165
Max	8.402	14.338	11.733	10.740	13.983	12.376	8.529
Min	3.838	4.688	5.392	6.446	6.121	4.519	5.963
Settle	7.626	13.832	7.153	7.269	6.469	x	x
Mean (m)	5.332	7.114	8.413	8.847	9.119	7.977	6.946
StDev (s)	0.865	2.145	1.564	0.992	1.492		
s / m	0.162	0.302	0.186	0.112	0.164		
m + s	6.197	9.260	9.977	9.840	10.611		

7Yr Avg Mean (m_{7Yr}) 7.678 **5Yr Avg St Dev $(s/m)_{5Yr}$** 0.185 **Price Ceiling, = m_{7Yr} * (1 + $(s/m)_{5Yr}$)** 9.100

Northern Utilities, Inc.
NYMEX Closing Prices, 24 months prior to Settle, Last 5 complete years & 2 years still trading - December



Stats	Dec-04	Dec-05	Dec-06	Dec-07	Dec-08	Dec-09	Dec-10
Count	500	500	500	500	500	397	145
Max	9.363	14.764	12.183	11.389	14.323	12.726	8.223
Min	4.043	4.868	6.335	7.203	6.312	5.229	6.333
Settle	7.976	11.180	8.318	7.203	6.386	x	x
Mean (m)	5.720	7.673	9.159	9.420	9.437	8.386	7.156
StDev (s)	1.032	2.321	1.618	1.030	1.572		
s / m	0.180	0.302	0.177	0.109	0.167		
m + s	6.752	9.994	10.777	10.450	11.009		

7Yr Avg Mean (m_{7Yr}) 8.136 **5Yr Avg St Dev $(s/m)_{5Yr}$** 0.187 **Price Ceiling, = m_{7Yr} * (1 + $(s/m)_{5Yr}$)** 9.658

Historical Frequency Distribution of Change in Contract Values

Natural Gas Futures Contracts for Delivery During the Winter Seasons of 2004-05 through 2008-09

Frequency Distribution
Number of Contract Days at a Given Level of Market Appreciation

Market Price vs. Purchase Price	Winter 2004-05	Winter 2005-06	Winter 2006-07	Winter 2007-08	Winter 2008-09	5 year Period
-75%	0	0	0	0	0	0
-70%	0	0	0	0	23	23
-65%	0	0	0	0	106	106
-60%	0	0	0	0	220	220
-55%	0	0	0	0	358	358
-50%	0	0	2	0	571	573
-45%	0	0	115	0	561	676
-40%	0	0	260	0	664	924
-35%	0	3	339	0	728	1,070
-30%	0	3	891	0	769	1,663
-25%	0	9	1,366	163	723	2,261
-20%	3	16	1,302	485	732	2,538
-15%	28	57	1,230	1,382	501	3,198
-10%	107	230	1,859	1,765	658	4,619
-5%	324	579	2,304	2,172	1,152	6,531
0%	995	968	2,334	2,255	1,416	7,968
5%	1,347	1,310	1,525	2,762	786	7,730
10%	1,564	1,600	567	1,651	738	6,120
15%	1,444	1,383	138	752	714	4,431
20%	1,443	1,170	18	270	571	3,472
25%	1,572	864	0	54	422	2,912
30%	948	591	0	34	426	1,999
35%	1,180	462	0	14	435	2,091
40%	1,073	449	0	8	335	1,865
45%	517	455	0	1	261	1,234
50%	457	438	0	0	218	1,113
55%	283	430	0	0	195	908
60%	181	459	0	0	89	729
65%	155	491	0	0	28	674
70%	166	478	0	0	8	652
75%	88	416	0	0	1	505
80%	69	341	0	0	0	410
85%	82	344	0	0	0	426
90%	40	239	0	0	0	279
95%	24	186	0	0	0	210
100%	22	152	0	0	0	174
Contract Days	14,112	14,123	14,250	13,768	14,409	70,662
Contracts Held	72	72	72	72	72	360
Average Days Held	196	196	198	191	200	196

Probability Function
Likelihood of Contract Appreciating a Given Percentage

0%	96.7%	93.6%	32.2%	56.7%	46.1%	65.0%
5%	89.7%	86.8%	15.8%	40.3%	36.3%	53.7%
10%	80.1%	77.5%	5.1%	20.2%	30.8%	42.7%
15%	69.0%	66.2%	1.1%	8.2%	25.7%	34.1%
20%	58.8%	56.4%	0.1%	2.8%	20.7%	27.8%
25%	48.6%	48.1%	0.0%	0.8%	16.8%	22.9%
30%	37.5%	42.0%	0.0%	0.4%	13.9%	18.8%
35%	30.7%	37.8%	0.0%	0.2%	10.9%	15.9%
40%	22.4%	34.5%	0.0%	0.1%	7.9%	13.0%
45%	14.8%	31.4%	0.0%	0.0%	5.6%	10.4%
50%	11.1%	28.1%	0.0%	0.0%	3.7%	8.6%
55%	7.9%	25.0%	0.0%	0.0%	2.2%	7.0%
60%	5.9%	22.0%	0.0%	0.0%	0.9%	5.7%
65%	4.6%	18.7%	0.0%	0.0%	0.3%	4.7%
70%	3.5%	15.3%	0.0%	0.0%	0.1%	3.8%
75%	2.3%	11.9%	0.0%	0.0%	0.0%	2.8%
80%	1.7%	8.9%	0.0%	0.0%	0.0%	2.1%
85%	1.2%	6.5%	0.0%	0.0%	0.0%	1.5%
90%	0.6%	4.1%	0.0%	0.0%	0.0%	0.9%
95%	0.3%	2.4%	0.0%	0.0%	0.0%	0.5%
100%	0.2%	1.1%	0.0%	0.0%	0.0%	0.2%

Historical Frequency Distribution of Change in Contract Values

Natural Gas Futures Contracts for Delivery Months of Winter 2004-05

	Market Price vs. Purchase Price	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05	Apr-05	Winter 2004-05
Frequency Distribution Number of Contract Days at a Given Level of Market Appreciation	-75%	0	0	0	0	0	0	0
	-70%	0	0	0	0	0	0	0
	-65%	0	0	0	0	0	0	0
	-60%	0	0	0	0	0	0	0
	-55%	0	0	0	0	0	0	0
	-50%	0	0	0	0	0	0	0
	-45%	0	0	0	0	0	0	0
	-40%	0	0	0	0	0	0	0
	-35%	0	0	0	0	0	0	0
	-30%	0	0	0	0	0	0	0
	-25%	0	0	0	0	0	0	0
	-20%	3	0	0	0	0	0	3
	-15%	18	0	0	9	1	0	28
	-10%	40	9	0	29	29	0	107
	-5%	89	61	33	53	88	0	324
	0%	187	184	191	200	211	22	995
	5%	240	220	254	273	303	57	1,347
	10%	212	248	271	312	303	218	1,564
	15%	245	227	233	233	300	206	1,444
	20%	207	218	261	276	252	229	1,443
	25%	158	221	240	275	315	363	1,572
	30%	139	129	124	113	156	287	948
	35%	104	185	206	210	177	298	1,180
	40%	93	132	188	219	235	206	1,073
	45%	36	48	56	55	91	231	517
	50%	11	19	43	44	39	301	457
	55%	1	34	33	38	41	136	283
	60%	0	25	34	41	43	38	181
	65%	0	21	25	19	29	61	155
	70%	0	10	28	38	30	60	166
	75%	0	19	14	12	8	35	88
	80%	0	9	4	7	10	39	69
	85%	0	1	22	10	20	29	82
	90%	0	3	4	17	0	16	40
	95%	0	0	3	2	3	16	24
	100%	0	0	0	1	0	21	22
Contract Days		1,783	2,023	2,267	2,486	2,684	2,869	14,112
Contracts Held		12	12	12	12	12	12	72
Average Days Held		149	169	189	207	224	239	196

Probability Function Likelihood of Contract Appreciating a Given Percentage	0%	91.6%	96.5%	98.5%	96.3%	95.6%	100.0%	96.7%
	5%	81.1%	87.4%	90.1%	88.3%	87.7%	99.2%	89.7%
	10%	67.6%	76.6%	78.9%	77.3%	76.5%	97.2%	80.1%
	15%	55.7%	64.3%	67.0%	64.8%	65.2%	89.6%	69.0%
	20%	42.0%	53.1%	56.7%	55.4%	54.0%	82.5%	58.8%
	25%	30.4%	42.3%	45.2%	44.3%	44.6%	74.5%	48.6%
	30%	21.5%	31.4%	34.6%	33.2%	32.9%	61.8%	37.5%
	35%	13.7%	25.0%	29.1%	28.7%	27.0%	51.8%	30.7%
	40%	7.9%	15.9%	20.0%	20.2%	20.5%	41.4%	22.4%
	45%	2.7%	9.3%	11.7%	11.4%	11.7%	34.3%	14.8%
	50%	0.7%	7.0%	9.3%	9.2%	8.3%	26.2%	11.1%
	55%	0.1%	6.0%	7.4%	7.4%	6.9%	15.7%	7.9%
	60%	0.0%	4.3%	5.9%	5.9%	5.3%	11.0%	5.9%
	65%	0.0%	3.1%	4.4%	4.3%	3.7%	9.7%	4.6%
	70%	0.0%	2.1%	3.3%	3.5%	2.6%	7.5%	3.5%
	75%	0.0%	1.6%	2.1%	2.0%	1.5%	5.4%	2.3%
	80%	0.0%	0.6%	1.5%	1.5%	1.2%	4.2%	1.7%
	85%	0.0%	0.2%	1.3%	1.2%	0.9%	2.9%	1.2%
	90%	0.0%	0.1%	0.3%	0.8%	0.1%	1.8%	0.6%
	95%	0.0%	0.0%	0.1%	0.1%	0.1%	1.3%	0.3%
	100%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.2%

Historical Frequency Distribution of Change in Contract Values

Natural Gas Futures Contracts for Delivery Months of Winter 2005-06

Frequency Distribution
Number of Contract Days at a Given Level of Market Appreciation

Market Price vs. Purchase Price	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	Winter 2005-06
-75%	0	0	0	0	0	0	0
-70%	0	0	0	0	0	0	0
-65%	0	0	0	0	0	0	0
-60%	0	0	0	0	0	0	0
-55%	0	0	0	0	0	0	0
-50%	0	0	0	0	0	0	0
-45%	0	0	0	0	0	0	0
-40%	0	0	0	0	0	0	0
-35%	0	0	0	0	3	0	3
-30%	0	0	0	0	3	0	3
-25%	0	0	0	2	7	0	9
-20%	0	3	0	5	8	0	16
-15%	7	38	0	1	10	1	57
-10%	49	84	21	25	29	22	230
-5%	86	140	76	77	95	105	579
0%	145	226	139	136	147	175	968
5%	242	244	194	179	199	252	1,310
10%	222	203	264	283	291	337	1,600
15%	190	181	213	232	253	314	1,383
20%	180	111	199	203	216	261	1,170
25%	107	77	131	149	174	226	864
30%	73	35	84	103	115	181	591
35%	37	28	58	74	106	159	462
40%	21	39	60	79	87	163	449
45%	32	45	64	74	88	152	455
50%	39	33	68	81	77	140	438
55%	48	23	64	83	78	134	430
60%	15	42	89	89	95	129	459
65%	26	60	83	101	101	120	491
70%	57	26	91	99	101	104	478
75%	44	41	73	82	78	98	416
80%	28	33	68	75	66	71	341
85%	48	22	65	72	81	56	344
90%	25	21	47	51	49	46	239
95%	15	20	43	45	40	23	186
100%	22	14	31	35	43	7	152
Contract Days	1,758	1,789	2,225	2,435	2,640	3,276	14,123
Contracts Held	12	12	12	12	12	12	72
Average Days Held	147	149	185	203	220	273	196

Probability Function
Likelihood of Contract Appreciating a Given Percentage

0%	91.9%	85.2%	95.6%	95.5%	94.1%	96.1%	93.6%
5%	83.7%	72.6%	89.4%	89.9%	88.6%	90.8%	86.8%
10%	69.9%	58.9%	80.7%	82.5%	81.0%	83.1%	77.5%
15%	57.3%	47.6%	68.8%	70.9%	70.0%	72.8%	66.2%
20%	46.5%	37.5%	59.2%	61.4%	60.4%	63.2%	56.4%
25%	36.2%	31.2%	50.3%	53.1%	52.2%	55.2%	48.1%
30%	30.1%	26.9%	44.4%	46.9%	45.6%	48.3%	42.0%
35%	26.0%	25.0%	40.6%	42.7%	41.3%	42.8%	37.8%
40%	23.9%	23.4%	38.0%	39.7%	37.3%	37.9%	34.5%
45%	22.7%	21.2%	35.3%	36.4%	34.0%	33.0%	31.4%
50%	20.9%	18.7%	32.4%	33.4%	30.6%	28.3%	28.1%
55%	18.7%	16.9%	29.4%	30.1%	27.7%	24.1%	25.0%
60%	15.9%	15.6%	26.5%	26.7%	24.8%	20.0%	22.0%
65%	15.1%	13.2%	22.5%	23.0%	21.2%	16.0%	18.7%
70%	13.6%	9.9%	18.8%	18.9%	17.3%	12.4%	15.3%
75%	10.4%	8.4%	14.7%	14.8%	13.5%	9.2%	11.9%
80%	7.8%	6.1%	11.4%	11.4%	10.6%	6.2%	8.9%
85%	6.3%	4.3%	8.4%	8.3%	8.1%	4.0%	6.5%
90%	3.5%	3.1%	5.4%	5.4%	5.0%	2.3%	4.1%
95%	2.1%	1.9%	3.3%	3.3%	3.1%	0.9%	2.4%
100%	1.3%	0.8%	1.4%	1.4%	1.6%	0.2%	1.1%

Historical Frequency Distribution of Change in Contract Values

Natural Gas Futures Contracts for Delivery Months of Winter 2006-07

	Market Price vs. Purchase Price	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	Winter 2006-07
Frequency Distribution Number of Contract Days at a Given Level of Market Appreciation	-75%	0	0	0	0	0	0	0
	-70%	0	0	0	0	0	0	0
	-65%	0	0	0	0	0	0	0
	-60%	0	0	0	0	0	0	0
	-55%	0	0	0	0	0	0	0
	-50%	2	0	0	0	0	0	2
	-45%	44	0	0	55	16	0	115
	-40%	65	0	0	89	106	0	260
	-35%	56	28	30	80	145	0	339
	-30%	85	144	163	175	274	50	891
	-25%	110	160	296	306	355	139	1,366
	-20%	182	147	203	203	221	346	1,302
	-15%	306	160	98	99	97	470	1,230
	-10%	270	349	271	243	224	502	1,859
	-5%	214	382	390	390	382	546	2,304
	0%	219	317	429	454	467	448	2,334
	5%	145	231	258	264	275	352	1,525
	10%	71	84	96	101	108	107	567
	15%	22	28	30	25	23	10	138
	20%	4	5	3	3	3	0	18
	25%	0	0	0	0	0	0	0
	30%	0	0	0	0	0	0	0
	35%	0	0	0	0	0	0	0
	40%	0	0	0	0	0	0	0
	45%	0	0	0	0	0	0	0
	50%	0	0	0	0	0	0	0
	55%	0	0	0	0	0	0	0
	60%	0	0	0	0	0	0	0
	65%	0	0	0	0	0	0	0
	70%	0	0	0	0	0	0	0
	75%	0	0	0	0	0	0	0
	80%	0	0	0	0	0	0	0
	85%	0	0	0	0	0	0	0
	90%	0	0	0	0	0	0	0
	95%	0	0	0	0	0	0	0
	100%	0	0	0	0	0	0	0
Contract Days		1,795	2,035	2,267	2,487	2,696	2,970	14,250
Contracts Held		12	12	12	12	12	12	72
Average Days Held		150	170	189	207	225	248	198

Probability Function Likelihood of Contract Appreciating a Given Percentage	0%	25.7%	32.7%	36.0%	34.1%	32.5%	30.9%	32.2%
	5%	13.5%	17.1%	17.1%	15.8%	15.2%	15.8%	15.8%
	10%	5.4%	5.7%	5.7%	5.2%	5.0%	3.9%	5.1%
	15%	1.4%	1.6%	1.5%	1.1%	1.0%	0.3%	1.1%
	20%	0.2%	0.2%	0.1%	0.1%	0.1%	0.0%	0.1%
	25%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	30%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	35%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	40%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	45%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	50%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	55%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	60%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	65%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	70%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	75%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	80%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	85%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	90%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	95%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	100%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Historical Frequency Distribution of Change in Contract Values

Natural Gas Futures Contracts for Delivery Months of Winter 2007-08

Frequency Distribution
Number of Contract Days at a Given Level of Market Appreciation

Market Price vs. Purchase Price	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	Winter 2007-08
-75%	0	0	0	0	0	0	0
-70%	0	0	0	0	0	0	0
-65%	0	0	0	0	0	0	0
-60%	0	0	0	0	0	0	0
-55%	0	0	0	0	0	0	0
-50%	0	0	0	0	0	0	0
-45%	0	0	0	0	0	0	0
-40%	0	0	0	0	0	0	0
-35%	0	0	0	0	0	0	0
-30%	0	0	0	0	0	0	0
-25%	36	0	43	63	21	0	163
-20%	136	54	83	115	97	0	485
-15%	210	258	285	358	271	0	1,382
-10%	241	310	348	401	357	108	1,765
-5%	190	315	377	430	418	442	2,172
0%	291	303	323	332	301	705	2,255
5%	337	398	475	468	389	695	2,762
10%	211	218	230	232	309	451	1,651
15%	89	105	96	94	175	193	752
20%	30	29	28	26	60	97	270
25%	0	0	0	0	2	52	54
30%	0	0	0	0	0	34	34
35%	0	0	0	0	0	14	14
40%	0	0	0	0	0	8	8
45%	0	0	0	0	0	1	1
50%	0	0	0	0	0	0	0
55%	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0
65%	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0
75%	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0
85%	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0
95%	0	0	0	0	0	0	0
100%	0	0	0	0	0	0	0
Contract Days	1,771	1,990	2,288	2,519	2,400	2,800	13,768
Contracts Held	12	12	12	12	12	12	72
Average Days Held	148	166	191	210	200	233	191

Probability Function
Likelihood of Contract Appreciating a Given Percentage

0%	54.1%	52.9%	50.3%	45.7%	51.5%	80.4%	56.7%
5%	37.7%	37.7%	36.2%	32.6%	39.0%	55.2%	40.3%
10%	18.6%	17.7%	15.5%	14.0%	22.8%	30.4%	20.2%
15%	6.7%	6.7%	5.4%	4.8%	9.9%	14.3%	8.2%
20%	1.7%	1.5%	1.2%	1.0%	2.6%	7.4%	2.8%
25%	0.0%	0.0%	0.0%	0.0%	0.1%	3.9%	0.8%
30%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.4%
35%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.2%
40%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.1%
45%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
50%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
55%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
60%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
65%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
70%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
75%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
80%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
85%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
90%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
95%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
100%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Historical Frequency Distribution of Change in Contract Values

Natural Gas Futures Contracts for Delivery Months of Winter 2008-09

	Market Price vs. Purchase Price	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	Winter 2008-09
Frequency Distribution Number of Contract Days at a Given Level of Market Appreciation	-75%	0	0	0	0	0	0	0
	-70%	0	0	0	0	0	0	0
	-65%	0	0	0	0	15	8	23
	-60%	0	0	1	10	46	49	106
	-55%	0	0	17	44	70	89	220
	-50%	3	13	34	61	112	135	358
	-45%	15	36	74	107	173	166	571
	-40%	36	49	72	123	131	150	561
	-35%	39	60	115	170	148	132	664
	-30%	59	94	132	150	170	123	728
	-25%	55	100	148	152	145	169	769
	-20%	81	125	137	129	119	132	723
	-15%	82	113	117	127	147	146	732
	-10%	84	76	71	63	57	150	501
	-5%	106	116	122	114	104	96	658
	0%	167	185	195	202	200	203	1,152
	5%	211	217	214	215	223	336	1,416
	10%	121	115	119	128	128	175	786
	15%	99	114	110	109	121	185	738
	20%	116	114	121	124	115	124	714
	25%	97	99	100	95	99	81	571
	30%	72	62	67	69	70	82	422
	35%	66	72	67	67	71	83	426
	40%	71	76	75	77	71	65	435
	45%	58	53	57	57	55	55	335
	50%	47	48	45	42	46	33	261
	55%	38	41	43	46	42	8	218
	60%	44	46	35	32	38	0	195
	65%	33	18	14	9	15	0	89
	70%	14	8	2	2	2	0	28
	75%	7	1	0	0	0	0	8
	80%	1	0	0	0	0	0	1
	85%	0	0	0	0	0	0	0
	90%	0	0	0	0	0	0	0
	95%	0	0	0	0	0	0	0
	100%	0	0	0	0	0	0	0
Contract Days		1,822	2,051	2,304	2,524	2,733	2,975	14,409
Contracts Held		12	12	12	12	12	12	72
Average Days Held		152	171	192	210	228	248	200

Probability Function Likelihood of Contract Appreciating a Given Percentage	0%	69.3%	61.9%	54.9%	50.5%	47.4%	48.1%	54.1%
	5%	60.1%	52.9%	46.4%	42.5%	40.1%	41.2%	46.1%
	10%	48.5%	42.3%	37.1%	34.0%	31.9%	29.9%	36.3%
	15%	41.9%	36.7%	31.9%	28.9%	27.3%	24.1%	30.8%
	20%	36.4%	31.1%	27.2%	24.6%	22.8%	17.8%	25.7%
	25%	30.1%	25.5%	21.9%	19.7%	18.6%	13.7%	20.7%
	30%	24.8%	20.7%	17.6%	15.9%	15.0%	11.0%	16.8%
	35%	20.8%	17.7%	14.7%	13.2%	12.4%	8.2%	13.9%
	40%	17.2%	14.2%	11.8%	10.5%	9.8%	5.4%	10.9%
	45%	13.3%	10.5%	8.5%	7.4%	7.2%	3.2%	7.9%
	50%	10.1%	7.9%	6.0%	5.2%	5.2%	1.4%	5.6%
	55%	7.5%	5.6%	4.1%	3.5%	3.5%	0.3%	3.7%
	60%	5.4%	3.6%	2.2%	1.7%	2.0%	0.0%	2.2%
	65%	3.0%	1.3%	0.7%	0.4%	0.6%	0.0%	0.9%
	70%	1.2%	0.4%	0.1%	0.1%	0.1%	0.0%	0.3%
	75%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
	80%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	85%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	90%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	95%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	100%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Historical Frequency Distribution of Change in Contract Values

Natural Gas Futures Contracts for Delivery Month of Nov-04

Frequency Distribution
Number of Contract Days at a Given Level of Market Appreciation

Mkt Price vs. Purch Price	9/30/03	10/31/03	11/26/03	12/31/03	1/28/04	2/27/04	4/1/04	4/28/04	5/26/04	6/28/04	7/28/04	8/27/04	Nov-04
-75%	0	0	0	0	0	0	0	0	0	0	0	0	0
-70%	0	0	0	0	0	0	0	0	0	0	0	0	0
-65%	0	0	0	0	0	0	0	0	0	0	0	0	0
-60%	0	0	0	0	0	0	0	0	0	0	0	0	0
-55%	0	0	0	0	0	0	0	0	0	0	0	0	0
-50%	0	0	0	0	0	0	0	0	0	0	0	0	0
-45%	0	0	0	0	0	0	0	0	0	0	0	0	0
-40%	0	0	0	0	0	0	0	0	0	0	0	0	0
-35%	0	0	0	0	0	0	0	0	0	0	0	0	0
-30%	0	0	0	0	0	0	0	0	0	0	0	0	0
-25%	0	0	0	0	0	0	0	0	0	0	0	0	0
-20%	0	0	0	0	0	0	0	0	3	0	0	0	3
-15%	0	0	0	0	0	0	0	0	11	7	0	0	18
-10%	0	0	0	0	0	0	5	7	11	8	9	0	40
-5%	0	0	0	0	0	0	9	8	40	14	9	9	89
0%	24	12	0	2	17	9	22	16	27	33	18	7	187
5%	26	15	9	39	17	24	42	41	6	9	8	4	240
10%	13	9	12	24	30	32	42	36	1	5	7	1	212
15%	36	35	36	32	34	37	14	8	0	1	5	7	245
20%	27	26	27	37	37	42	3	3	0	0	0	5	207
25%	22	26	22	38	35	14	0	0	0	0	0	1	158
30%	38	31	36	22	9	3	0	0	0	0	0	0	139
35%	33	30	34	4	3	0	0	0	0	0	0	0	104
40%	29	34	29	1	0	0	0	0	0	0	0	0	93
45%	10	15	11	0	0	0	0	0	0	0	0	0	36
50%	3	4	4	0	0	0	0	0	0	0	0	0	11
55%	0	1	0	0	0	0	0	0	0	0	0	0	1
60%	0	0	0	0	0	0	0	0	0	0	0	0	0
65%	0	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0	0
75%	0	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0	0
85%	0	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0	0
95%	0	0	0	0	0	0	0	0	0	0	0	0	0
100%	0	0	0	0	0	0	0	0	0	0	0	0	0
Contract Days	261	238	220	199	182	161	137	119	99	77	56	34	1,783
Contracts Held	1	1	1	1	1	1	1	1	1	1	1	1	12
Average Days Held	261	238	220	199	182	161	137	119	99	77	56	34	149

Probability Function
Likelihood of Contract Appreciating a Given Percentage

0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	89.8%	87.4%	34.3%	62.3%	67.9%	73.5%	91.6%
5%	90.8%	95.0%	100.0%	99.0%	90.7%	94.4%	73.7%	73.9%	7.1%	19.5%	35.7%	52.9%	81.1%
10%	80.8%	88.7%	95.9%	79.4%	81.3%	79.5%	43.1%	39.5%	1.0%	7.8%	21.4%	41.2%	67.6%
15%	75.9%	84.9%	90.5%	67.3%	64.8%	59.6%	12.4%	9.2%	0.0%	1.3%	8.9%	38.2%	55.7%
20%	62.1%	70.2%	74.1%	51.3%	46.2%	36.6%	2.2%	2.5%	0.0%	0.0%	0.0%	17.6%	42.0%
25%	51.7%	59.2%	61.8%	32.7%	25.8%	10.6%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	30.4%
30%	43.3%	48.3%	51.8%	13.6%	6.6%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	21.5%
35%	28.7%	35.3%	35.5%	2.5%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.7%
40%	16.1%	22.7%	20.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.9%
45%	5.0%	8.4%	6.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%
50%	1.1%	2.1%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%
55%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
60%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
65%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
70%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
75%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
80%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
85%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
90%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
95%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
100%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%